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(54) Abstract Title

Collision avoidance by restricting channel access requests according to RSSI

(57) A radio communication system broadcasts a signal (AACH, fig.3) to a plurality of portable and/or mobile radio units 10-20 which defines a minimum received signal strength which a radio unit must receive before it is permitted to make a request for access to the base station 1. The defined minimum value may be varied. Alternatively, the broadcast signal (AACH) may provide a threshold minimum value which each radio unit uses to decide which of two sub groups it belongs to, depending on whether its RSSI is above or below the threshold. The two sub-groups use two different sub-sets of access request time slots for making access requests to the radio communication system. Both arrangements lead to maximising the channel efficiency of the radio communication system. The first restricts the number of radio units which can make access requests. The second allows substantial equalisation of the proportions of access request time slots in which requests collide in each of the two sub-sets of access request time-slots. Suitable for use in a TETRA system.

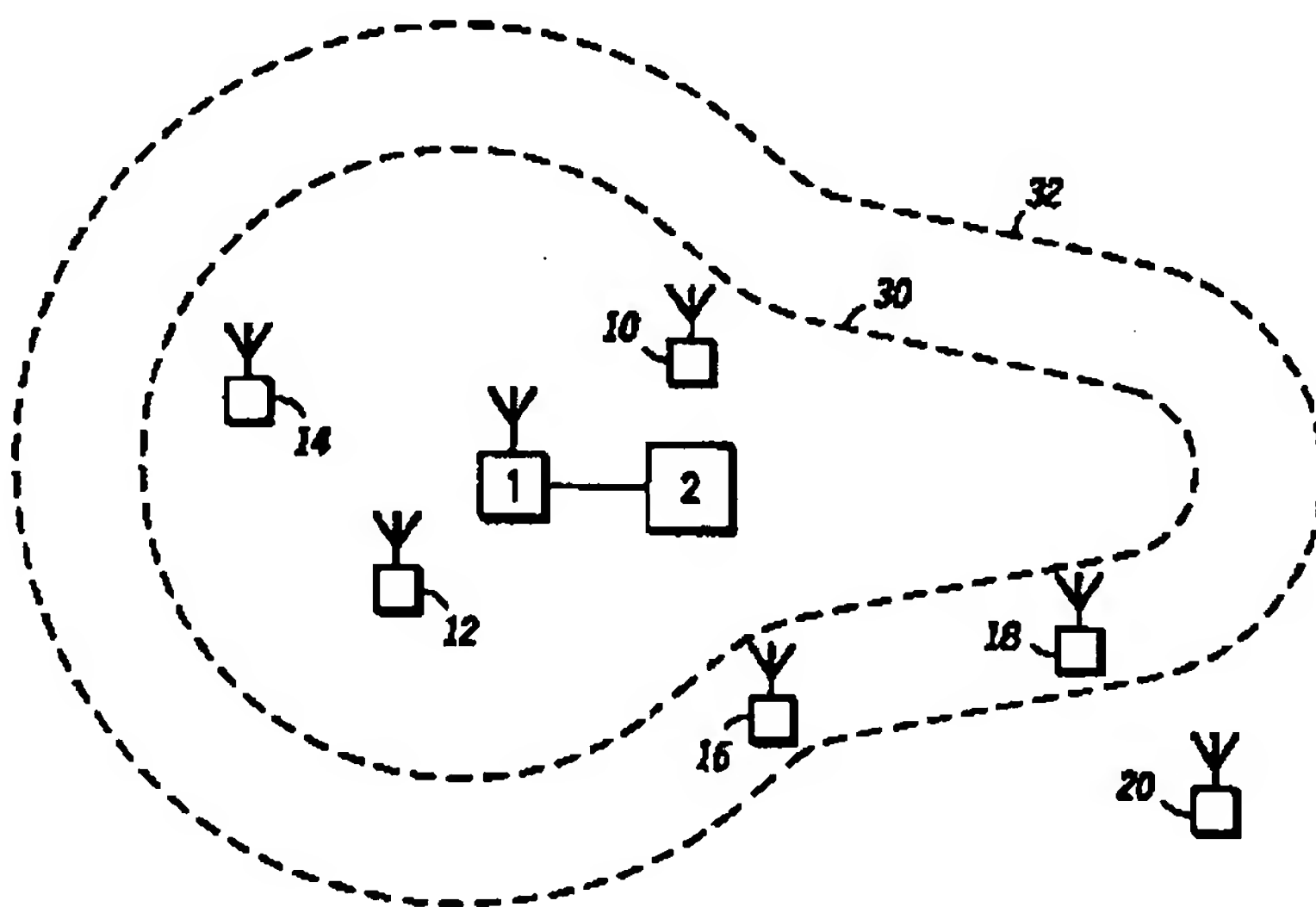


FIG.2

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